

What is claimed is:

1. A turbofan comprising:

a hub coupled with a rotational shaft of a driving device;

5 a plurality of blades installed at a circumference of the hub radially; and

a shroud at an opposite side to the hub so as to be coupled with a plurality of the blades wherein the blades are placed between the shroud and the hub, and

10 wherein the hub, blades, and shroud are formed in one body and

wherein the shroud comprises a first extension protruding to extend from a coupling part with a leading edge of each of the blades in an inward radial direction of the rotational shaft and a second extension extending straightly from the first extension in a direction of the rotational axis toward a side opposite to the hub.

2. The turbofan of claim 1, wherein the second extension
20 extends from an inward end of the first extension so as to form an 'L' figure with the first extension.

3. The turbofan of claim 2, wherein a minimum inner diameter of the shroud is equal to or longer than a maximum outer diameter of the hub.

5 4. The turbofan of claim 2, wherein the shroud comprises the first extension, the second extension, and a shroud body and wherein a surface, which is coupled with the blade, of a portion at which the shroud body and first extension are connected to each other is curved.

10 5. The turbofan of claim 4, wherein a surface, which is coupled with the blade, of a portion at which the shroud body and first extension are connected to each other is concave.

15 6. The turbofan of claim 1, wherein the second extension extends from an outward end of the first extension so as to form an 'L' figure with the first extension.

20 7. The turbofan of claim 6, wherein a minimum inner diameter of the shroud is equal to or longer than a maximum outer diameter of the hub.

8. The turbofan of claim 6, wherein the shroud comprises the first extension, the second extension, and a shroud body and wherein a surface, which is coupled with the blade, of a portion at which the shroud body and first extension are connected to each other is curved.

9. The turbofan of claim 1, wherein a surface, which is coupled with the blade, of a portion at which the shroud body and first extension are connected to each other is concave.

10. In fabricating a turbofan comprising: a hub coupled with a rotational shaft of a driving device; a plurality of blades installed at a circumference of the hub radially; and a shroud at an opposite side to the hub so as to be coupled with a plurality of the blades wherein the blades are placed between the shroud and the hub, and wherein the hub, blades, and shroud are formed in one body and wherein the shroud comprises a first extension protruding to extend from a coupling part with a leading edge of each of the blades in an inward radial direction of the rotational shaft and a second extension extending straightly from the first extension in a direction of the rotational axis toward a side opposite to the hub, assuming

that a surface where the blades are formed is an upper surface by taking the hub as a reference,
a mold for fabricating the turbofan, comprising:

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a lower mold pattern comprising:

a hub molding part for molding a lower surface of the hub;

a blade molding part protruding upward from a circumferential end of the hub molding part in a direction of the rotational shaft so as to mold a portion of each of the blades; and

a shroud molding part for molding a lower surface of the shroud having the first extension at an upper area of the blade molding part; and

an upper molding pattern comprising:

a hub molding part detachable from the upper mold pattern for molding an upper surface of the hub;

a blade molding part having a boundary surface forming a boundary with an inner side of the blade molding part of the upper mold pattern for molding a rest portion of each of the blades; and

a shroud molding part for molding an upper surface of the shroud having the second extension.

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